

CORRELATION OF MAP UNITS

Volcanic and sedimentary rocks	Intrusive rocks
Kk	Tk9
Kjts	Jtg
Jtg	Jtg
MzPzv	MzPzv

TERTIARY

CRETACEOUS

JURASSIC

JURASSIC?

MESOZOIC AND

PALEOZOIC

PRECAMBRIAN

DESCRIPTION OF MAP UNITS

**VOLCANIC AND SEDIMENTARY ROCKS**  
Kk **Kuskokwim Group (late and Early Cretaceous)**—Thick, predominantly marine sedimentary unit consisting of graywacke, sandstone, conglomerate, siltstone, and shale. May contain some volcanic rocks. Thickness of unit is probably at least 4,000 m thick and may be much thicker (Hoare and Coond, 1978)

Toglik terrane

Kk **Volcanic and sedimentary rocks (Early Cretaceous and Burwash)**—Thick, angularly complex, weathered, massive, tuffaceous, tuff, and volcanic rocks. Tuff units mostly fine grained, green or gray, but locally may be red. Tuff and tuffaceous rocks may contain some volcanic rocks. Thickness of unit is not well specified (Hoare and Coond, 1978)

Toglik terrane

Kk **Volcanic and sedimentary rocks (Early Cretaceous and Burwash)**—Thick, angularly complex, weathered, massive, tuffaceous, tuff, and volcanic rocks. As mapped, may include some rocks of Permian and Triassic age. Volcanic rocks range from fine-grained, light gray, to coarse-grained, dark gray, and trachytic flows, tuff, and breccia. Tuff and rhyolitic sedimentary rocks associated with volcanic rocks. Thickness of unit is not well specified (Hoare and Coond, 1978)

Toglik terrane

Jtg **Graywacke (Burwash)**—Thick marine sedimentary unit consisting of very hard graywacke, sandstone, and siltstone. May contain some volcanic rocks. Contains quartz and plagioclase-rich wacke to quartz-poor volcanic wacke. Generally contains black angular or tuff chips (Hoare and Coond, 1978)

Toglik terrane

MzPzv **Volcanic and sedimentary rocks (Mesozoic and Paleogene)**—Disrupted assemblage of foliated metabasalt, low-grade schist, marble, chert, graywacke, limestone, limnetic band, and volcanic components in age of Early Miocene. Discovered in Fairweather Range (Hoare, 1985). Bedrock rocks consist of pillow basalts, breccia, crystal lithic tuff, and flows of matrix and interbedded tuff, and breccia. Matrix consists of angular fragments of foliated andalusite schist and siltstone, argillite, graywacke, conglomerate, and limestone. Pillow basalts and other volcanic rocks are common. Foliated metabasalt, chert units or other granular volcanic rocks (Hoare and Coond, 1978; Box, 1985)

Toglik terrane

Tk9 **Granitic rocks (Tertiary to Early Cretaceous)**—Fine-, medium-, and coarse-grained plutonic rocks. Includes gneiss, semi-metamorphic rocks of quartz monzonite, granodiorite, and/or quartz diorite.

Killick terrane

Jgb **Gabbro (Tertiary)**—Medium- to coarse-grained, locally pegmatitic, intrusive rocks consisting of hornblende, clinopyroxene, and/or plagioclase. Locally contain olivine. Generally associated with ultramafic rocks (Hoare and Coond, 1978)

Killick terrane

Jum **Ultramafic rocks (Jurassic?)**—Serpentine, serpentinized dunite, and websterite. Some contain olivine. Generally associated with gabbroic rocks (Jgb) (Hoare and Coond, 1978)

Killick terrane

**METAMORPHIC ROCKS**  
pCm **Foliated metamorphic rocks (Precambrian)**—Foliated metamorphic rocks that consist of medium- to coarse-grained, massive, and well-foliated biotite-hornblende schist, quartz-amphibole, quartz-mica-schist, and marble (Hoare and Coond, 1978)

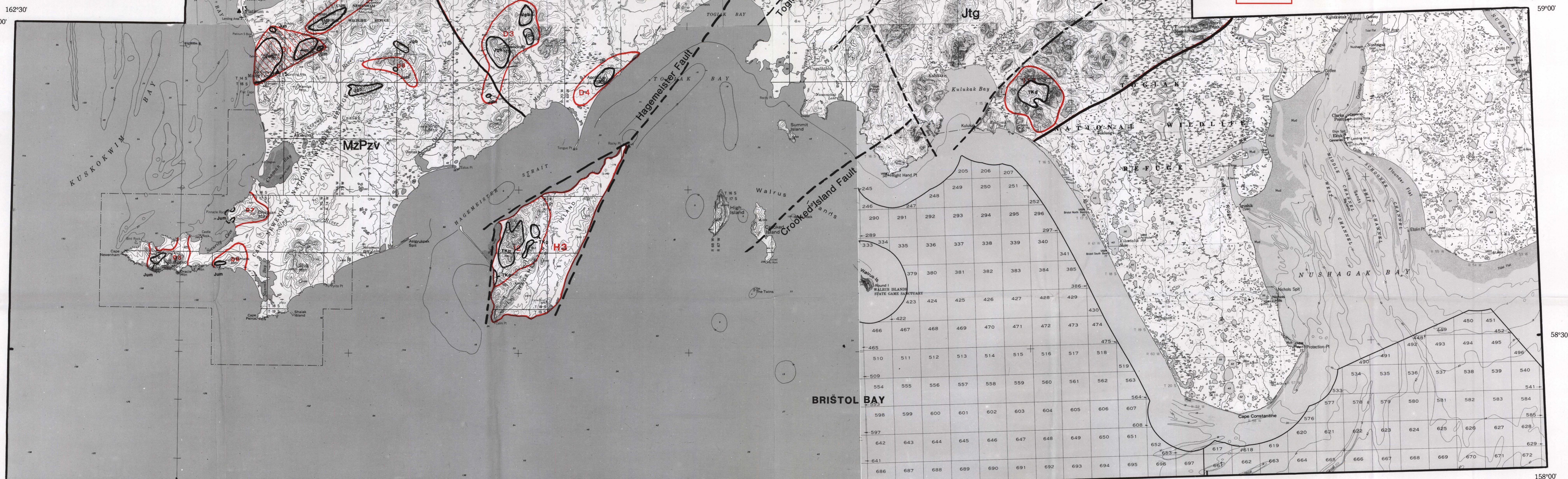
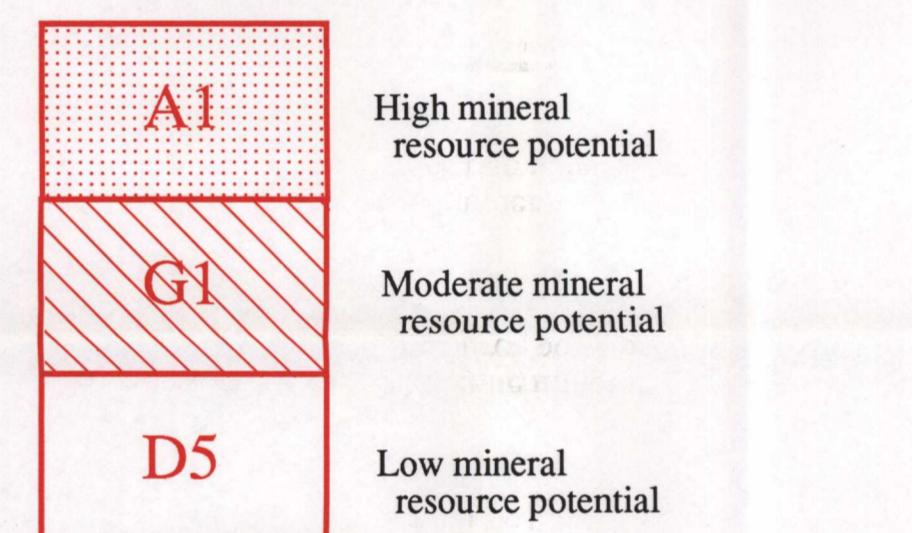
Killick terrane

**Contact—Known, approximate, gradational, and inferred**  
**Fault or fault zone—Dashed where approximate, inferred, or concealed**

**Lode deposit—Name shown on table 1**

**Placer deposit—Name shown on table 1**

**AREAS HAVING METALLIC MINERAL RESOURCE POTENTIAL**—Areas labeled with letter and number corresponding to table 2 and text. The map must be used together with table 2 to correctly interpret the potential of overlapping areas. Where two or more overlapping areas have different levels of potential, the overlapping area is marked to show the highest potential determined



SCALE 1:250,000  
15 MILES  
15 KILOMETERS

CONTOUR INTERVAL 200 FEET

WITH SUPPLEMENTARY CONTOURS AT 100-FOOT INTERVALS

NATIONAL GEOGRAPHIC UTM GRID DATA 1983

MAP SHOWING METALLIC MINERAL RESOURCE POTENTIAL IN THE GOODNEWS BAY, HAGEMEISTER ISLAND, AND NUSHAGAK BAY 1° x 3° QUADRANGLES, SOUTHWEST ALASKA

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